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UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

01/29/2003

J. MICHAEL MARTINEZ DE ANDINO, ESQ. HUNTON & WILLIAMS RIVERFRONT PLAZA, EAST TOWER 951 EAST BYRD STREET RICHMOND, VA 23219-4074

EX	AMINER .
BACK	ER, FIRMIN
ART UNIT	CLASS-SUBCLASS
3621	705-058000

DATE MAILED: 01/29/2003

APPLIC	PPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
.09/764,293 01/19/2001		01/19/2001	Jonathan Schull	58587.000003	8797

TITLE OF INVENTION: METHOD FOR ADAPTING A SOFTWARE PRODUCT TO AN ENVIRONMENT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1300	\$300	\$1600	04/29/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>, THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED</u>. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- ☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



PART B - FEE(S) TRANSMITTAL



Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE

1.--

Commissioner for Patents Washington, D.C. 20231

(703)746-4000 <u>Fax</u>

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for

maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1) Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 7590 01/29/2003 J. MICHAEL MARTINEZ DE ANDINO, ESQ. **HUNTON & WILLIAMS** Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile transmitted to the USPTO, on the date indicated below. RIVERFRONT PLAZA, EAST TOWER 951 EAST BYRD STREET RICHMOND, VA 23219-4074 (Depositor's name) (Signature (Date APPLICATION NO. FILING DATE FIRST NAMED INVENTOR CONFIRMATION NO. ATTORNEY DOCKET NO. 09/764,293 01/19/2001 58587.000003 Jonathan Schull 8797 TITLE OF INVENTION: METHOD FOR ADAPTING A SOFTWARE PRODUCT TO AN ENVIRONMENT APPLN, TYPE SMALL ENTITY ISSUE FEE **PUBLICATION FEE** TOTAL FEE(S) DUE DATE DUE NO \$1300 \$300 nonprovisional \$1600 04/29/2003 **EXAMINER** ART UNIT CLASS-SUBCLASS BACKER, FIRMIN 3621 705-058000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. single firm (having as a member a registered attorney or agent) and the names of up to 2 ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer registered patent attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Please check the appropriate assignee category or categories (will not be printed on the patent) ☐ individual ☐ corporation or other private group entity ☐ government 4a. The following fee(s) are enclosed: 4b. Payment of Fee(s): ☐ A check in the amount of the fee(s) is enclosed. ☐ Issue Fee ☐ Payment by credit card. Form PTO-2038 is attached. ☐ Publication Fee ☐ The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form). ☐ Advance Order - # of Copies Commissioner for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

(Date)

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Department of Commerce, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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(Authorized Signature)



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J. MICHAEL MARTINEZ DE ANDINO, ESQ. HUNTON & WILLIAMS RIVERFRONT PLAZA, EAST TOWER			BACKER, FIRMIN		
			ART UNIT	PAPER NUMBER	
951 EAST BYRD	STREET		3621		
RICHMOND, VA 23219-4074			DATE MAILED: 01/29/2003		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 316 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 316 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



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	HUNTON & WILLIAMS RIVERFRONT PLAZA, EAST TOWER			PAPER NUMBER	
951 EAST BYRD	951 EAST BYRD STREET				
RICHMOND, VA UNITED STATES			DATE MAILED: 01/29/2003		

Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

Ł		Applicati n N .	Applicant(s)	
	Notic of Allowahilit	09/764,293	1	\wedge
	Notic of Allowability	Examin r	SCHULL, JONATHA	N /
		Firmin Backer	3621	
	Th MAILING DATE of this communication at All claims being allowable, PROSECUTION ON THE MERITS herewith (or previously mailed), a Notice of Allowance (PTOL NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATEN of the Office or upon petition by the applicant. See 37 CFR 1 1. This communication is responsive to January 19 th , 200 2. The allowed claim(s) is/are 23-57. 3. The drawings filed on are accepted by the Exant 4. Acknowledgment is made of a claim for foreign priority a) All b) Some* c) None of the: 1 Certified copies of the priority documents here in copies of the certified copies of the priority documents here in copies of the certified copies of the priority documents here in copies of the certified copies of the priority lnternational Bureau (PCT Rule 17.2(a)) * Certified copies not received: 5 Acknowledgment is made of a claim for domestic priority (a) The translation of the foreign language provisions.	appears on the c ver sheet we SIS (OR REMAINS) CLOSED (-85) or other appropriate commercial TRIGHTS. This application is 313 and MPEP 1308. 11. Ininer. under 35 U.S.C. § 119(a)-(d) or eave been received. ave been received in Application documents have been received.	ith th correspondenc addreson this application. If not included unication will be mailed in due consubject to withdrawal from issue of the consumption of the consump	d \. ourse. THIS at the initiativ
	A claim for domestic priority	/ under 35 U.S.C. §§ 120 and/o	r 121.	
7	Applicant has THREE MONTHS FROM THE "MAILING DATE" below. Failure to timely comply will result in ABANDONMENT. A SUBSTITUTE OATH OR DECLARATION must be sulphone in the sulphone including changes required by the Notice of Draftsp. (a) including changes required by the proposed drawing including changes required by the proposed drawing (c) including changes required by the attached Examine	bmitted. Note the attached EXA cason(s) why the oath or declaraters of the case of the cas	MINER'S AMENDMENT or NOTation is deficient. (PTO-948) attached has been approved by the Exartin the Office action of Paper No.	TICE OF
	Identifying indicia such as the application number (see 37 CFR of each sheet. The drawings should be filed as a separate paper	1.84(c)) should be written on the er with a transmittal letter addres	drawings in the top margin (not t sed to the Official Draftsperson.	he back)
9. at	☐ DEPOSIT OF and/or INFORMATION about the depotation depotation of the depotation o	osit of BIOLOGICAL MATER THE DEPOSIT OF BIOLOGICA	RIAL must be submitted. Note AL MATERIAL.	the
Αt	tachment(s)			
3 <u>[</u>	 Notice of References Cited (PTO-892) Notice of Draftperson's Patent Drawing Review (PTO-948) Information Disclosure Statements (PTO-1449), Paper No Examiner's Comment Regarding Requirement for Deposit of Biological Material 	6 Examiner's 8 Examiner's 9 Other	Informal Patent Application (PTO Summary (PTO-413), Paper No. Amendment/Comment Statement of Reasons for Allow	·
U.S	. Patent and Trademark Office	CHEDIAGO	P. TRAMMETE	
PT	O-37 (Rev. 04-01)	otice of Allowability TECHNOL(Y PATENT EXAMINER	

Notice of Allowability TECHNOLOGY CENTER 3600

Part of Paper No. 10 .

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Art Unit: 3621

DETAILED ACTION

This is in response to a letter for patent filed on January 19th, 2001 in which claims 1-22 were presented for examination. A preliminary amendment was filed on January 19th, 2001 in which claim 1-22 were canceled and claims 23-57 were added to the letter. Claims 23-57 are currently pending in the letter.

Allowable Subject Matter

- 1. Claims 23-57 are allowed.
- 2. The following is an examiner's statement of reasons for allowance:
 - a. Applicant teaches a method and system whereby software piracy can be deterred while copying and purchasing can be encouraged. User to user copying plays an important positive role in the present system, and in the shareware industry, and as "piracy" it plays an important negative role in other shareware- and internet-based marketing schemes. This concept discloses methods whereby software copying and purchasing can be tracked, studied, and rewarded, whereby software lineages can become adapted to their environments. Applicant inventive concept is novel and innovative in the sense that it provides the software product with code portion with a parameter value, a mutation rate, and a set of probabilistic mutation criteria that are used to determine if the operating parameter value should mutate so that the parameter value would change should it be determined that the operating value be mutate. The closest prior art,

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MacLoed et al (U.S. Patent No 6,343,295) teaches an inventive concept that is directed toward database technology that provides users with powerful tools necessary to manage and exploit data. The inventive concept provided a system provides a system and method for tracking the lineage of data within database tables. According to this concept data within the tables are tracked by attaching lineage information to the data, preferably, by adding a lineage identifier to each row in a table. Data that share a common lineage can be identified by virtue of sharing a common lineage identifier. However, MacLoed et al fail to teach a software product with code portion with a parameter value, a mutation rate, and a set of probabilistic mutation criteria that are used to determine if the operating parameter value should mutate so that the parameter value would change should it be determined that the operating value be mutate.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

- 3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - b. Wiemann (U.S. Patent No. 6,298,317) teach method for functionally simulating and verifying the correctness of a computer program. The method begins by generating a

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mutated computer program which includes a syntactic mutation. The method next preprocesses the mutated computer program to identify the syntactic mutation within the
mutated computer program as either a subtle or non-subtle syntactic mutation. If the
mutated computer program has a non-subtle syntactic mutation, the functional simulation
of the mutated computer program is terminated, and another mutated computer program
is generated, as described above. If the mutated computer program contains a subtle
syntactic mutation, the mutated computer program is then simulated in an attempt to
detect the subtle syntactic mutation within the mutated computer program within a
predetermined simulation period. If the subtle syntactic mutation is detected within a
predetermined simulation period, the functional simulation of the mutated computer
program is terminated, and another mutated computer program is generated, as
described above. However, if the subtle syntactic mutation is not detected within a
predetermined simulation period, the present invention provides an indication that the
subtle syntactic mutation was not detected

c. Wong et al (WO 98/16882) teach a method and system for continuous software monitoring is provided in which the attributes or parameters of the functional computer program to be monitored are specified at the time the functional computer program is compiled and a monitoring computer program is simultaneously compiled by a compiler for parallel execution in a target computer environment. The functional and monitoring programs are compiled to include links to enable data to be extracted from the functional computer program, the main application, by the monitoring program. The main

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application is arranged to include a spawn monitor so that each process of the main application which is spawned during execution in the main application processor has its

own monitoring process which is spawned in the monitoring processor.

d. Variar (NPL) discusses the ability to trace the lineage of data on a data

warehouse in order to increase users confidence.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Firmin Backer whose telephone number is (703) 305-0624. The

examiner can normally be reached on Mon-Thu 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, James Trammel can be reached on (703) 305-9768. The fax phone numbers for the

organization where this application or proceeding is assigned are (703) 305-7687 for regular

communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 308-1113.

Firmin Backer

September 3, 2002

JAMES P. TRAMMELL

SUPERVISURY PATENT EXAMINER

TECHNOLOGY CENTER 3600